1. Normal algorithm with variance in the environment
ORIGINAL ALGO ONLY – For DENSE, raise temperature to 10

Exp.	Env.	mean_ter	var_ter	mean_step	var_step
1.a.1	Sparse	None	None	None	None
	Sparse	100	None	None	None
	Sparse	10 000	None	None	None
	Sparse	1 000 000	None	None	None
1.a.2	Sparse	None	None	None	None
	Sparse	None	None	1	None
	Sparse	None	None	10	None
	Sparse	10 000	None	10	None
1.b.1	Semisparse	None	None	None	None
	Semisparse	10 000	None	None	None
	Semisparse	None	None	1	None
	Semisparse	10 000	None	1	None
1.c.1	Dense	None	None	None	None
	Dense	None	None	100	None
	Dense	10 000	None	None	None
	Dense	10 000	None	100	None

2. Modified algorithm vs normal algorithms
Compare original algo against modified algo on these environments:

Exp.	Env.	mean_ter	var_ter	mean_step	var_step
2.a.1	Sparse	None	None	None	None
2.a.2.a	Sparse	10 000	None	None	None
2.a.2.b	Sparse	10 000	250 000	None	None
2.a.3.a	Sparse	None	None	1	None
2.a.3.b	Sparse	None	None	1	0.6
2.a.4.a	Sparse	None	None	10	None
2.a.4.b	Sparse	None	None	10	60
2.a.5.a	Sparse	10 000	None	10	None
2.a.5.b	Sparse	10 000	250 000	10	60
2.b.1	Semisparse	None	None	None	None
2.b.2.a	Semisparse	10 000	None	None	None

2.b.2.b	Semisparse	10 000	250 000	None	None
2.b.3.a	Semisparse	None	None	10	None
2.b.3.b	Semisparse	None	None	10	60
2.b.4.a	Semisparse	10 000	None	10	None
2.b.4.b	Semisparse	10 000	250 000	10	60
2.c.1	Dense	None	None	None	None
2.c.2.a	Dense	10 000	None	None	None
2.c.2.b	Dense	10 000	250 000	None	None
2.c.3.a	Dense	None	None	100	None
2.c.3.b	Dense	None	None	100	6000
2.c.4.a	Dense	10 000	None	100	None
2.c.4.b	Dense	10 000	None	100	6000

How does the modified algorithm compare to the normal algorithm?
→ compare on each environment with different reward variance means, and different variance variances:

(need to do one graph for each case a.1, a.2, …, b.1, b.2, … with a curve for each algo + curve for normal algo on env without variance on the reward – to compare how close do we get)

a. Sparse environment

1. rew_var_mean_ter = None
   (hypothesis: no difference)
2. rew_var_mean_ter = 10 000, rew_var_var_ter = None
   (hypothesis: no difference)
3. rew_var_mean_ter = 10 000, rew_var_var_ter = 250 000 (+- 500)
   (hypothesis: modified is a bit better)
4. rew_var_mean_ter = 10 000, rew_var_var_ter = 25 000 000 (+- 5 000)
   (hypothesis: modified is really better)

b. Semi sparse environment

1. rew_var_mean_ter = None, rew_var_mean_step = None
   (hypothesis: no difference)
2. rew_var_mean_ter = None, rew_var_mean_step = 1, rew_var_var_step = None
   (hypothesis: no difference)
3. rew_var_mean_ter = None, rew_var_mean_step = 1, rew_var_var_step = 0.6
   (hypothesis: modified is better)
4. rew_var_mean_ter = 10 000, rew_var_var_ter = 25 000 000,
   rew_var_mean_step = None
   (hypothesis: modified is better)
5. rew_var_mean_ter = 10 000, rew_var_var_ter = 25 000 000, rew_var_mean_step = 1,
   rew_var_var_step = 0.6
   (hypothesis: modified is way better)

c. Dense environment

1. rew_var_mean_ter = None, rew_var_mean_step = None
   (hypothesis: no difference)
2. rew_var_mean_ter = None, rew_var_mean_step = 1, rew_var_var_step = None
   (hypothesis: no difference)
3. rew_var_mean_ter = None, rew_var_mean_step = 1, rew_var_var_step = 0.6
   (hypothesis: modified is a bit better)
4. rew_var_mean_ter = None, rew_var_mean_step = 100, rew_var_var_step = 6 000
   (hypothesis: modified is a lot better)
5. rew_var_mean_ter = 10 000, rew_var_var_ter = None,
   rew_var_mean_step = None
   (hypothesis: no difference)
6. rew_var_mean_ter = 10 000, rew_var_var_ter = 25 000 000,
   rew_var_mean_step = None
   (hypothesis: modified is better)
7. rew_var_mean_ter = 10 000, rew_var_var_ter = 25 000 000,
   rew_var_mean_step = 1, rew_var_var_step = 0.6
   (hypothesis: modified is better)
7. rew_var_mean_ter = 10 000, rew_var_var_ter = 25 000 000,
   rew_var_mean_step = 100, rew_var_var_step = 6 000
   (hypothesis: modified is way better)